

FIG.1

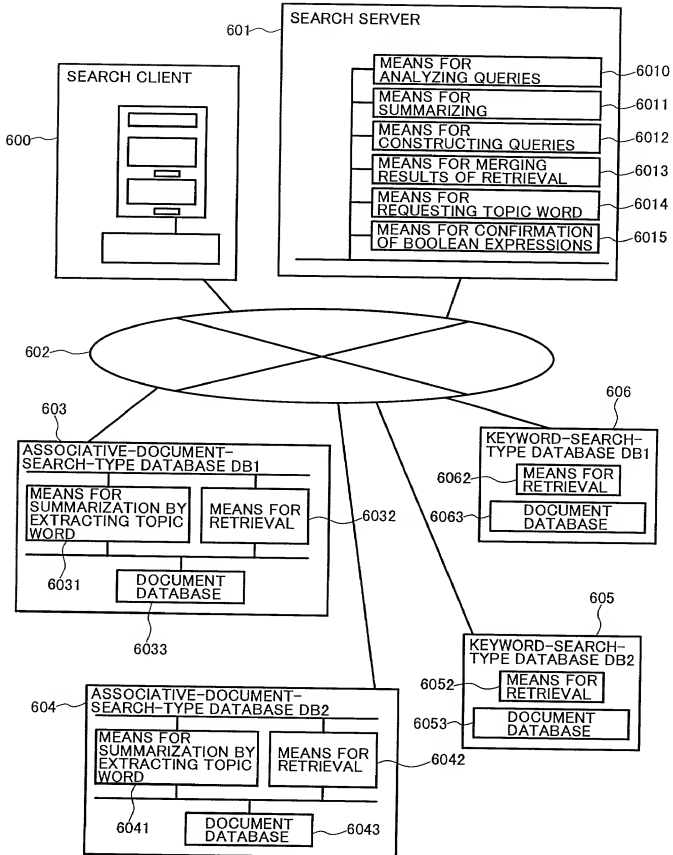


FIG.2

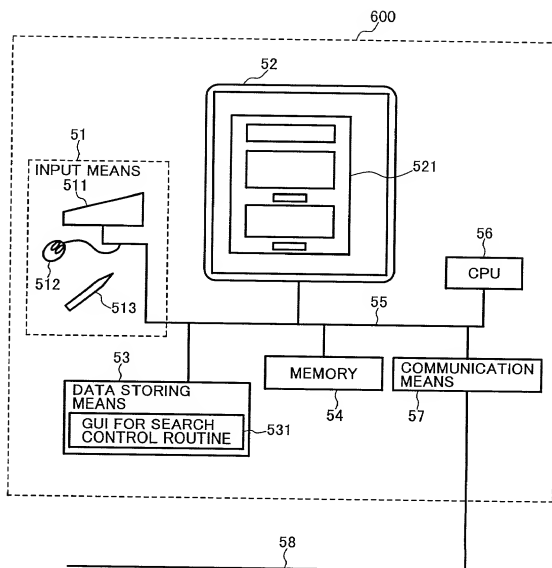


FIG.3

The interface is divided into several sections, each with a 'HIDE' button and a vertical scrollbar on the right.

- Section 11:** Contains a text input field labeled 'KEYWORD 1' (1101) and two buttons: 'KEYWORD SEARCH' (1102) and 'CLIPBOARD SEARCH' (1103).
- Section 1201:** Contains a 'HIDE' button (1201) and a list of search engines:
  - ☒ A NEWSPAPER (1202) with an 'ASSOCIATIVE' button (1203).
  - ☐ B ENCYCLOPEDIA (1202) with an 'ASSOCIATIVE' button (1204).
  - ☒ C ARTICLE (1202) with an 'ASSOCIATIVE' button (1204).
  - ☒ D PATENT DATABASE (1202) with an 'ASSOCIATIVE' button (1204).
  - ☐ E SEARCH ENGINE (1202) with a 'KEYWORD' button (1205).
  - ☒ F SEARCH ENGINE (1202) with a 'KEYWORD' button (1205).
- Section 1301:** Contains a 'HIDE' button (1301) and a list of materials:
  - ☐ A NEWSPAPER : MATERIAL 2 (1302)
  - ☐ D PATENT DB : MATERIAL 3 (1302)
  - ☐ E SEARCH ENGINE : MATERIAL 4 (1302)
  - ☐ A NEWSPAPER : MATERIAL 5 (1302)
  - ☐ F SEARCH ENGINE : MATERIAL 6 (1302)
- Section 1303:** Contains a 'DOCUMENT SEARCH' button (1306).
- Section 1401:** Contains a 'HIDE' button (1401) and a list of words:
  - ☐ WORD1 ☐ WORD2 ☐ WORD3 ☐ WORD4 ☐ WORD5 (1402)
  - ☐ WORD6 ☐ WORD7 ☐ WORD8 ☐ WORD9 ☐ WORD10 (1402)
- Section 1402:** Contains a 'SEARCH USING TOPIC WORDS AS A QUERY' button (1405).

FIG.4

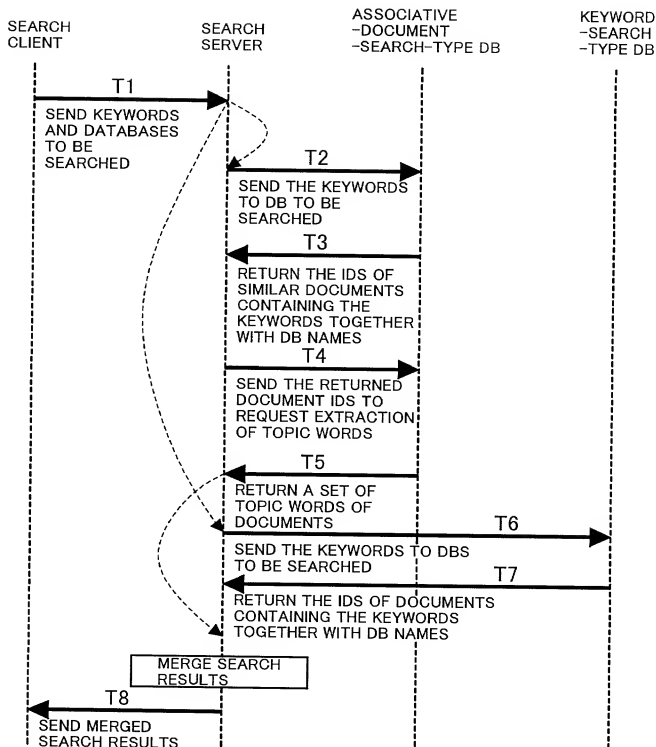


FIG.5

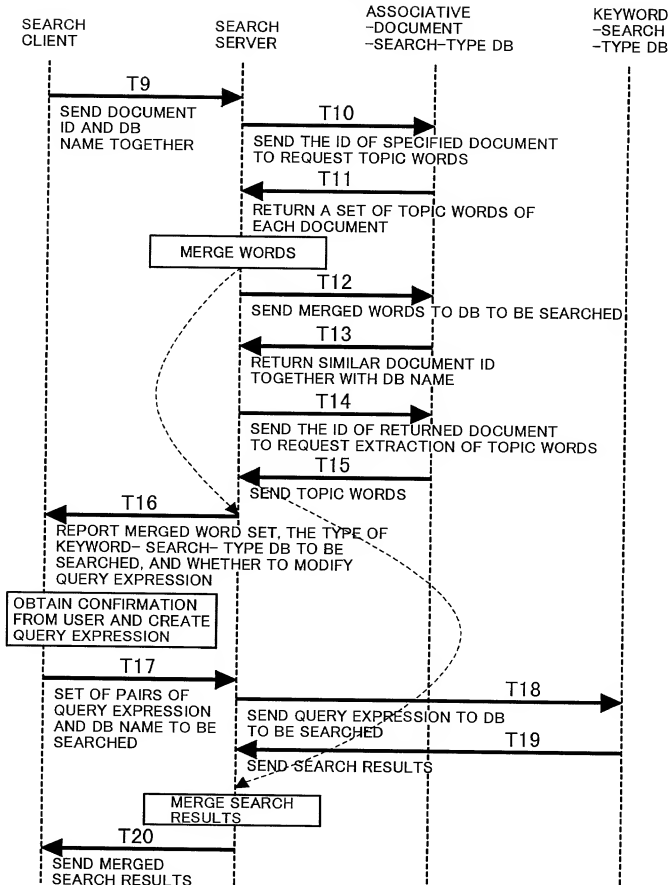


FIG.6

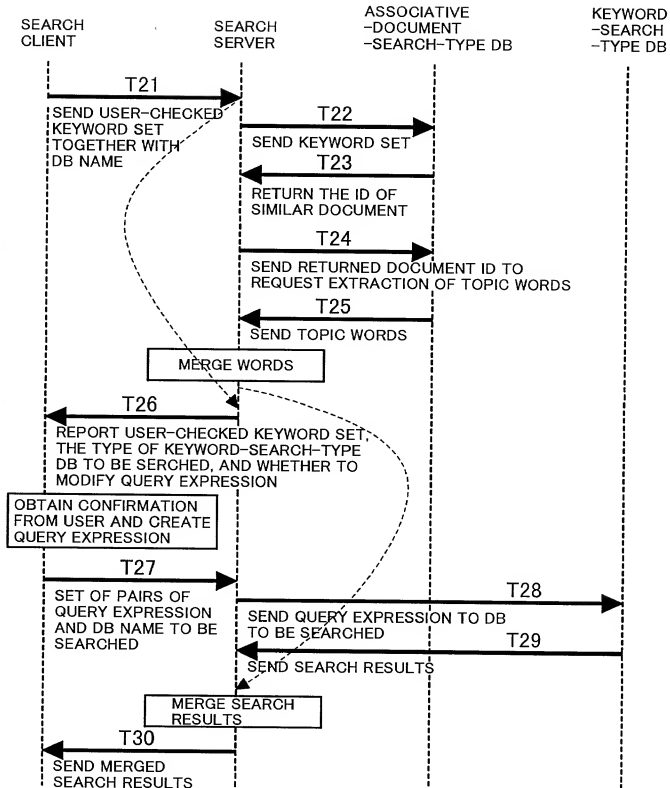


FIG.7

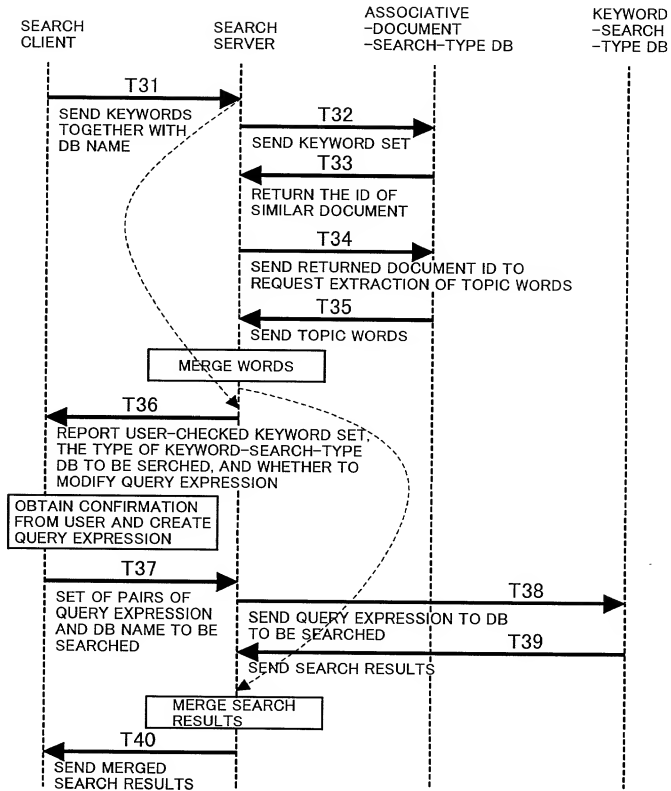


FIG.8

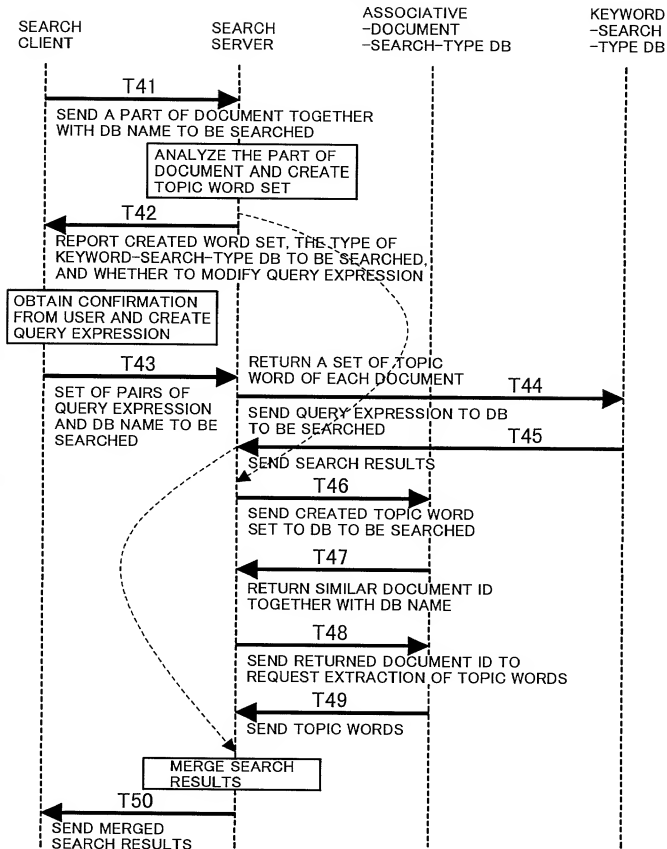




FIG.9

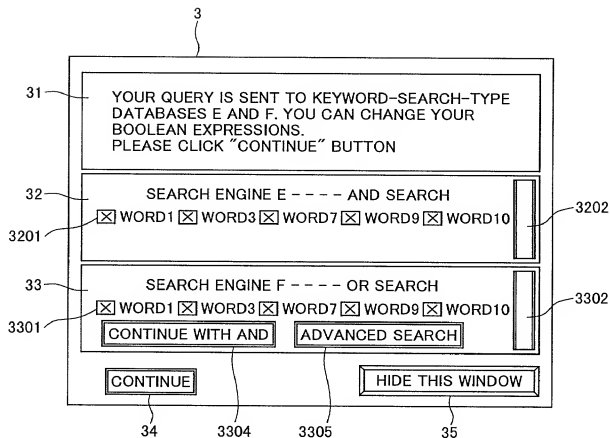


FIG.10

The interface is divided into several sections, each with a 'HIDE' button and a vertical scrollbar on the right:

- OPTION (1101):** Contains a text input field labeled 'KEYWORD 1' (1101) and two buttons: 'KEYWORD SEARCH' (1102) and 'CLIPBOARD SEARCH' (1103).
- Section 12:** Contains a list of search sources with checkboxes and search method buttons:
  - ☒ A NEWSPAPER [ASSOCIATIVE]
  - ☐ B ENCYCLOPEDIA [ASSOCIATIVE]
  - ☒ C ARTICLE [ASSOCIATIVE]
  - ☐ D PATENT DATABASE [ASSOCIATIVE]
  - ☒ E SEARCH ENGINE [KEYWORD]
  - ☒ F SEARCH ENGINE [KEYWORD]
- Section 13:** A section with a 'HIDE' button and a vertical scrollbar.
- Section 14:** Contains a 'DOCUMENT SEARCH' button (1306) and a 'HIDE' button.
- Section 1405:** Contains a button labeled 'SEARCH USING TOPIC WORDS AS A QUERY' (1405).

FIG.11

**OPTION**

KEYWORD 1      **KEYWORD SEARCH**  
**CLIPBOARD SEARCH**

**HIDE**

☒ A NEWSPAPER      **ASSOCIATIVE**

☐ B ENCYCLOPEDIA      **ASSOCIATIVE**

☒ C ARTICLE      **ASSOCIATIVE**

☐ D PATENT DATABASE      **ASSOCIATIVE**

☒ E SEARCH ENGINE      **KEYWORD**

☒ F SEARCH ENGINE      **KEYWORD**

**HIDE**

☒ C ARTICLE : MATERIAL 1 .....

☒ A NEWSPAPER : MATERIAL 2 .....

☐ D PATENT DB : MATERIAL 3 .....

☐ E SEARCH ENGINE : MATERIAL 4 .....

☐ A NEWSPAPER : MATERIAL 5 .....

☐ F SEARCH ENGINE : MATERIAL 6 .....

**DOCUMENT SEARCH**      1306

**HIDE**

☐ WORD1 ☐ WORD2 ☐ WORD3 ☐ WORD4 ☐ WORD5

☐ WORD6 ☐ WORD7 ☐ WORD8 ☐ WORD9 ☐ WORD10

**SEARCH USING TOPIC WORDS AS A QUERY**      1405

FIG.12

OPTION

KEYWORD 1      KEYWORD SEARCH  
CLIPBOARD SEARCH

HIDE

☒ A NEWSPAPER      ASSOCIATIVE

☐ B ENCYCLOPEDIA      ASSOCIATIVE

☒ C ARTICLE      ASSOCIATIVE

☐ D PATENT DATABASE      ASSOCIATIVE

☒ E SEARCH ENGINE      KEYWORD

☒ F SEARCH ENGINE      KEYWORD

HIDE

☒ C ARTICLE : MATERIAL 1 .....

☒ A NEWSPAPER : MATERIAL 2 .....

☐ D PATENT DB : MATERIAL 3 .....

☐ E SEARCH ENGINE : MATERIAL 4 .....

☐ A NEWSPAPER : MATERIAL 5 .....

☐ F SEARCH ENGINE : MATERIAL 6 .....

DOCUMENT SEARCH

201      DISPLAYING TOPIC WORDS

FIG.13

OPTION

KEYWORD 1      KEYWORD SEARCH  
CLIPBOARD SEARCH

HIDE

<input checked="" type="checkbox"/>	A NEWSPAPER	ASSOCIATIVE
<input type="checkbox"/>	B ENCYCLOPEDIA	ASSOCIATIVE
<input checked="" type="checkbox"/>	C ARTICLE	ASSOCIATIVE
<input type="checkbox"/>	D PATENT DATABASE	ASSOCIATIVE
<input checked="" type="checkbox"/>	E SEARCH ENGINE	KEYWORD
<input checked="" type="checkbox"/>	F SEARCH ENGINE	KEYWORD

202 DOCUMENT BROWSING

HIDE

<input checked="" type="checkbox"/>	WORD1	<input type="checkbox"/>	WORD2	<input type="checkbox"/>	WORD3	<input type="checkbox"/>	WORD4	<input type="checkbox"/>	WORD5
<input type="checkbox"/>	WORD6	<input checked="" type="checkbox"/>	WORD7	<input type="checkbox"/>	WORD8	<input checked="" type="checkbox"/>	WORD9	<input type="checkbox"/>	WORD10

SEARCH FROM  
TOPIC WORDS

FIG.14

12

OPTION

KEYWORD 1

KEYWORD SEARCH

CLIPBOARD SEARCH

DB SELECTION

HIDE

☒ C ARTICLE : MATERIAL 1 .....

☒ A NEWSPAPER : MATERIAL 2 .....

☐ D PATENT DB : MATERIAL 3 .....

☐ E SEARCH ENGINE : MATERIAL 4 .....

☐ A NEWSPAPER : MATERIAL 5 .....

☐ F SEARCH ENGINE : MATERIAL 6 .....

ASSOCIATIVE

DOCUMENT SEARCH

HIDE

☐ WORD1 ☐ WORD2 ☐ WORD3 ☐ WORD4 ☐ WORD5

☐ WORD6 ☐ WORD7 ☐ WORD8 ☐ WORD9 ☐ WORD10

SEARCH FROM

TOPIC WORDS

FIG.15

1101

OPTION

KEYWORD 1

KEYWORD SEARCH

CLIPBOARD SEARCH

HIDE

☐ A NEWSPAPER ASSOCIATIVE

☐ B ENCYCLOPEDIA ASSOCIATIVE

☐ C ARTICLE ASSOCIATIVE

☐ D PATENT DATABASE ASSOCIATIVE

☒ E SEARCH ENGINE KEYWORD

☒ F SEARCH ENGINE KEYWORD

HIDE

☐ E SEARCH ENGINE : MATERIAL 1 .....

☐ E SEARCH ENGINE : MATERIAL 1 .....

☐ F SEARCH ENGINE : MATERIAL 1 .....

☐ E SEARCH ENGINE : MATERIAL 1 .....

☐ E SEARCH ENGINE : MATERIAL 1 .....

☐ F SEARCH ENGINE : MATERIAL 1 .....

DOCUMENT SEARCH 1306

HIDE

SEARCH USING TOPIC WORDS AS A QUERY 1405

11

12

13

14

FIG.16

OPTION

KEYWORD 1

KEYWORD SEARCH

CLIPBOARD SEARCH

HIDE

☐ A NEWSPAPER ASSOCIATIVE

☒ B ENCYCLOPEDIA ASSOCIATIVE

☐ C ARTICLE ASSOCIATIVE

☐ D PATENT DATABASE ASSOCIATIVE

☒ E SEARCH ENGINE KEYWORD

☒ F SEARCH ENGINE KEYWORD

HIDE

☐ E SEARCH ENGINE : MATERIAL 1 .....

☐ E SEARCH ENGINE : MATERIAL 1 .....

☐ F SEARCH ENGINE : MATERIAL 1 .....

☐ E SEARCH ENGINE : MATERIAL 1 .....

☐ E SEARCH ENGINE : MATERIAL 1 .....

☐ F SEARCH ENGINE : MATERIAL 1 .....

DOCUMENT SEARCH

HIDE

SEARCH USING TOPIC WORDS AS A QUERY



FIG.17

OPTION

ALZHEIMER

KEYWORD SEARCH

CLIPBOARD SEARCH

HIDE

☒ A NEWSPAPER ASSOCIATIVE

☐ B ENCYCLOPEDIA ASSOCIATIVE

☒ C ARTICLE ASSOCIATIVE

☒ D PATENT DATABASE ASSOCIATIVE

☒ E SEARCH ENGINE KEYWORD

☒ F SEARCH ENGINE KEYWORD

HIDE

DOCUMENT SEARCH

HIDE

SEARCH USING TOPIC WORDS AS A QUERY

1101

1102

13

14

1306

1405

FIG.18

OPTION

ALZHEIMER

KEYWORD SEARCH

CLIPBOARD SEARCH

HIDE

☒ A NEWSPAPER 

ASSOCIATIVE

☐ B ENCYCLOPEDIA 

ASSOCIATIVE

☒ C ARTICLE 

ASSOCIATIVE

☒ D PATENT DATABASE 

ASSOCIATIVE

☒ F SEARCH ENGINE 

KEYWORD

☒ F SEARCH ENGINE 

KEYWORD

HIDE

☐ C ARTICLE : nnnnn : Membrane-anchored aspartyl protease with Alzheimer  
☐ A NEWSPAPER : nnnnnn : enzyme which is considered as a trigger of Alzheimer's disease  
☐ D PATENT DB : OOOOOOOO amyloid synthesis inhibitor  
☐ E SEARCH ENGINE : Alzheimers.com News | Elusive Alzheimer's Enzyme  
☐ A NEWSPAPER : ppppp : American bioventure companies (Amgen Inc.,etc)  
☐ F SEARCH ENGINE : 1.Researchers find enzyme associated with Alzheimer

DOCUMENT SEARCH

HIDE

☐ amyloid- $\beta$    ☐ alzheimer   ☐ APP   ☐ enzyme   ☐ BACE  
☐  $\beta$ -secretase   ☐  $\gamma$ -secretase   ☐ NSAIDs   ☐ Amgen   ☐ presenilin

SEARCH USING TOPIC WORDS AS A QUERY

FIG.18-225100

13

14

FIG.19

OPTION

ALZHEIMER

KEYWORD SEARCH

CLIPBOARD SEARCH

HIDE

☐ A NEWSPAPER ASSOCIATIVE

☐ B ENCYCLOPEDIA ASSOCIATIVE

☐ C ARTICLE ASSOCIATIVE

☐ D PATENT DATABASE ASSOCIATIVE

☒ E SEARCH ENGINE KEYWORD

☒ F SEARCH ENGINE KEYWORD

HIDE

☒ C ARTICLE : nnnnn : Membrane-anchored aspartyl protease with Alzheimer

☐ A NEWSPAPER : nnnnn : enzyme which is considered as a trigger of Alzheimer's disease

☐ D PATENT DB : OOOOOOOO amyloid synthesis inhibitor

☐ E SEARCH ENGINE : Alzheimers.com News | Elusive Alzheimer's Enzyme

☐ A NEWSPAPER : ppppp : American bioventure companies (Amgen Inc.,etc)

☐ F SEARCH ENGINE : 1.Researchers find enzyme associated with Alzheimer

1306 DOCUMENT SEARCH

HIDE

☐ amyloid- $\beta$  ☐ alzheimer ☐ APP ☐ enzyme ☐ BACE

☐  $\beta$ -secretase ☐  $\gamma$ -secretase ☐ NSAIDs ☐ Amgen ☐ presenilin

SEARCH USING TOPIC WORDS AS A QUERY

FIG.20

3

31 YOUR QUERY IS SENT TO KEYWORD-SEARCH-TYPE  
DATABASES E AND F. YOU CAN CHANGE YOUR  
BOOLEAN EXPRESSIONS.  
PLEASE CLICK "CONTINUE" BUTTON

32 SEARCH ENGINE E - - - - AND SEARCH

3201 ☐  $\beta$ -secretase ☐ enzyme ☒ APP ☒ alzheimer ☐ BACE  
☒ Transgenic mouse ☒  $\gamma$ -secretase ☒ presenilin ☒ NSAIDs

33 SEARCH ENGINE F - - - - OR SEARCH

3301 ☒  $\beta$ -secretase ☒ enzyme ☒ APP ☒ alzheimer ☒ BACE  
☒ Transgenic mouse ☒  $\gamma$ -secretase ☒ presenilin ☒ NSAIDs

34 35

FIG.21

OPTION

KEYWORD SEARCH  
CLIPBOARD SEARCH

HIDE

<input type="checkbox"/>	A NEWSPAPER	ASSOCIATIVE
<input type="checkbox"/>	B ENCYCLOPEDIA	ASSOCIATIVE
<input type="checkbox"/>	C ARTICLE	ASSOCIATIVE
<input type="checkbox"/>	D PATENT DATABASE	ASSOCIATIVE
<input checked="" type="checkbox"/>	E SEARCH ENGINE	KEYWORD
<input checked="" type="checkbox"/>	F SEARCH ENGINE	KEYWORD

HIDE

☒ E SEARCH ENGINE : Researchers find enzyme associated with Alzheimer's-  
☒ E SEARCH ENGINE : Enzyme offers promise of Alzheimer's drugs-Reference  
☒ F SEARCH ENGINE : 99.10.22-Scientists find enzyme linked to Alzheimer's.  
☒ E SEARCH ENGINE : Newsweek.com : Newsweek US Edition : Society : An Alz  
☒ E SEARCH ENGINE : Alzheimer Web  
☒ F SEARCH ENGINE : Alzheimers.com News | Elusive Alzheimer's Enzyme I den

1306 DOCUMENT SEARCH

HIDE

1405 SEARCH USING TOPIC WORDS AS A QUERY

14

FIG.22

**OPTION**

ALZHEIMER **KEYWORD SEARCH**  
**CLIPBOARD SEARCH**

**HIDE**

☐ A NEWSPAPER **ASSOCIATIVE**

☐ B ENCYCLOPEDIA **ASSOCIATIVE**

☐ C ARTICLE **ASSOCIATIVE**

☐ D PATENT DATABASE **ASSOCIATIVE**

☒ E SEARCH ENGINE **KEYWORD**

☒ F SEARCH ENGINE **KEYWORD**

**HIDE**

☐ C ARTICLE : nnnnn : Membrane-anchored aspartyl protease with Alzheimer

☐ A NEWSPAPER : mmmmm : enzyme which is considered as a trigger of Alzheimer's disease

☐ D PATENT DB : ○○○○○○○○ amyloid synthesis inhibitor

☐ E SEARCH ENGINE : Alzheimers.com News | Elusive Alzheimer's Enzyme

☐ A NEWSPAPER : ppppp : American bioventure companies (Amgen Inc.,etc)

☐ F SEARCH ENGINE : 1.Researchers find enzyme associated with Alzheimer

**DOCUMENT SEARCH**

**HIDE**

☐ amyloid- $\beta$  ☒ alzheimer ☒ APP ☐ enzyme ☒ BACE

☒  $\beta$ -secretase ☐  $\gamma$ -secretase ☐ NSAIDs ☐ Amgen ☐ presenilin

1405 **SEARCH USING TOPIC WORDS AS A QUERY**

FIG.23

3

31 YOUR QUERY IS SENT TO KEYWORD-SEARCH-TYPE  
DATABASES E AND F. YOU CAN CHANGE YOUR  
BOOLEAN EXPRESSIONS.  
PLEASE CLICK "CONTINUE" BUTTON

32 SEARCH ENGINE E - - - - AND SEARCH

3201 ☒  $\beta$ -secretase ☒ APP ☒ alzheimer ☒ BACE

33 SEARCH ENGINE F - - - - OR SEARCH

3301 ☒  $\beta$ -secretase ☒ APP ☒ alzheimer ☒ BACE

CONTINUE WITH AND ADVANCED SEARCH

34 CONTINUE

35 HIDE THIS WINDOW

FIG.24

OPTION

KEYWORD SEARCH

CLIPBOARD SEARCH

HIDE

☐ A NEWSPAPER 

ASSOCIATIVE

☐ B ENCYCLOPEDIA 

ASSOCIATIVE

☐ C ARTICLE 

ASSOCIATIVE

☐ D PATENT DATABASE 

ASSOCIATIVE

☒ E SEARCH ENGINE 

KEYWORD

☒ E SEARCH ENGINE 

KEYWORD

HIDE

☒ F SEARCH ENGINE : 99.10.22-Scientists find enzyme linked to Alzheimer's.
☒ E SEARCH ENGINE : Researchers find enzyme associated with Alzheimer's-
☒ E SEARCH ENGINE : Enzyme offers promise of Alzheimer's drugs-Reference
☒ E SEARCH ENGINE : Enzyme Points Way to Alzheimer's Therapies. Researcher
☒ E SEARCH ENGINE : Alzheimer Web
☒ F SEARCH ENGINE : Alzheimers.com News | Elusive Alzheimer's Enzyme I den

1306

DOCUMENT SEARCH

HIDE

1405

SEARCH USING TOPIC WORDS AS A QUERY

14



FIG.25

OPTION

ALZHEIMER

KEYWORD SEARCH

CLIPBOARD SEARCH

HIDE

☐ A NEWSPAPER ASSOCIATIVE

☒ B ENCYCLOPEDIA ASSOCIATIVE

☒ C ARTICLE ASSOCIATIVE

☐ D PATENT DATABASE ASSOCIATIVE

☐ E SEARCH ENGINE KEYWORD

☐ F SEARCH ENGINE KEYWORD

HIDE

☒ C ARTICLE : nnnnn : Membrane-anchored aspartyl protease with Alzheimer

☐ A NEWSPAPER : nnnnn : enzyme which is considered as a trigger of Alzheimer's disease

☒ D PATENT DB : OOOOOOOO amyloid synthesis inhibitor

☐ E SEARCH ENGINE : Alzheimers.com News | Elusive Alzheimer's Enzyme

☐ A NEWSPAPER : ppppp : American bioventure companies (Amgen Inc.,etc)

☐ F SEARCH ENGINE : 1.Researchers find enzyme associated with Alzheimer

1303

1306 DOCUMENT SEARCH

HIDE

☐ amyloid- $\beta$  ☐ alzheimer ☐ APP ☐ enzyme ☐ BACE

☐  $\beta$ -secretase ☐  $\gamma$ -secretase ☐ NSAIDs ☐ Amgen ☐ presenilin

SEARCH USING TOPIC WORDS AS A QUERY

FIG.26

OPTION

KEYWORD SEARCH  
CLIPBOARD SEARCH

HIDE

☐ A NEWSPAPER ASSOCIATIVE

☒ B ENCYCLOPEDIA ASSOCIATIVE

☒ C ARTICLE ASSOCIATIVE

☐ D PATENT DATABASE ASSOCIATIVE

☐ E SEARCH ENGINE KEYWORD

☐ F SEARCH ENGINE KEYWORD

HIDE

☐ C ARTICLE : nnnnn : Membrane-anchored aspartyl protease with Alzheimer

☐ B ENCYCLOPEDIA : Alzheimer's disease

☐ B ENCYCLOPEDIA : aging : [aging mechanism]

☐ C ARTICLE : bbbbb : Purification and cloning of amyloid precursor protein

☐ C ARTICLE : ccccc : A second cytotoxic proteolytic peptide derived from

☐ C ARTICLE : ddddd : Nicastrin modulates presenilin-mediated notch/glp-1

DOCUMENT SEARCH

HIDE

☐ alzheimer ☐ enzyme ☐ APP ☐  $\beta$ -secretase ☐ notch/glp-1

☐ Transgenic mouse ☐ BACE ☐ precursor ☐ presenilin

SEARCH USING TOPIC WORDS AS A QUERY

FIG.27

OPTION

ALZHEIMER

KEYWORD SEARCH

CLIPBOARD SEARCH

HIDE

☐ A NEWSPAPER ASSOCIATIVE

☒ B ENCYCLOPEDIA ASSOCIATIVE

☒ C ARTICLE ASSOCIATIVE

☐ D PATENT DATABASE ASSOCIATIVE

☐ E SEARCH ENGINE KEYWORD

☐ F SEARCH ENGINE KEYWORD

HIDE

☐ C ARTICLE : nnnnn : Membrane-anchored aspartyl protease with Alzheimer

☐ A NEWSPAPER : mmmmm : enzyme which is considered as a trigger of Alzheimer's disease

☐ D PATENT DB : OOOOOOOO amyloid synthesis inhibitor

☐ E SEARCH ENGINE : Alzheimers.com News | Elusive Alzheimer's Enzyme

☐ A NEWSPAPER : ppppp : American bioventure companies (Amgen Inc.,etc)

☐ F SEARCH ENGINE : 1.Researchers find enzyme associated with Alzheimer

DOCUMENT SEARCH

HIDE

☒ amyloid- $\beta$  ☒ alzheimer ☒ APP ☐ enzyme ☒ BACE

☐  $\beta$ -secretase ☐  $\gamma$ -secretase ☐ NSAIDs ☐ Amgen ☐ presenilin

SEARCH USING TOPIC WORDS AS A QUERY

FIG.28

OPTION

KEYWORD SEARCH  
CLIPBOARD SEARCH

HIDE

☐ A NEWSPAPER ASSOCIATIVE

☒ B ENCYCLOPEDIA ASSOCIATIVE

☒ C ARTICLE ASSOCIATIVE

☐ D PATENT DATABASE ASSOCIATIVE

☐ E SEARCH ENGINE KEYWORD

☐ F SEARCH ENGINE KEYWORD

HIDE

☐ C ARTICLE : bbbbb : Purification and cloning of amyloid precursor protein

☐ C ARTICLE : eeeee : Ibuprofen, inflammation and Alzheimer disease.

☐ B ENCYCLOPEDIA : Alzheimer's disease

☐ C ARTICLE : nnnnn : Membrane-anchored aspartyl protease with Alzheimer

☐ C ARTICLE : ddddd : Nicastrin modulates presenilin-mediated notch/glp-1

☐ B ENCYCLOPEDIA : aging : [aging mechanism]

DOCUMENT SEARCH

HIDE

☐ amyloid ☐ alzheimer ☐ BACE ☐  $\beta$ -secretase ☐ notch/glp-1

☐ Presenilin-mediated ☐ APP ☐ beta-APP ☐ precursor

SEARCH USING TOPIC  
WORDS AS A QUERY